FIG. 1

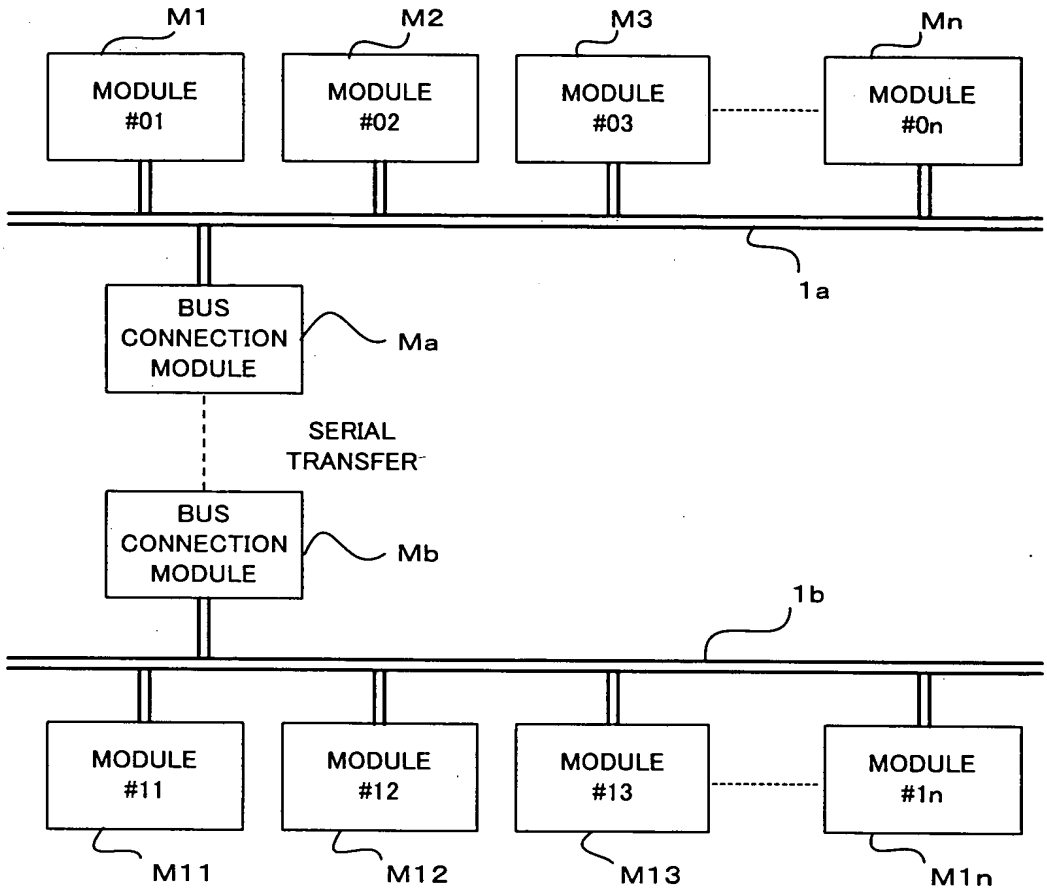

M1
M2
M3
Mn
MODULE #01
MODULE #02
MODULE #03
MODULE #0n
1a
BUS CONNECTION MODULE
Ma
SERIAL TRANSFER
BUS CONNECTION MODULE
Mb
1b
MODULE #11
MODULE #12
MODULE #13
MODULE #1n
M11
M12
M13
M1n

FIG.2

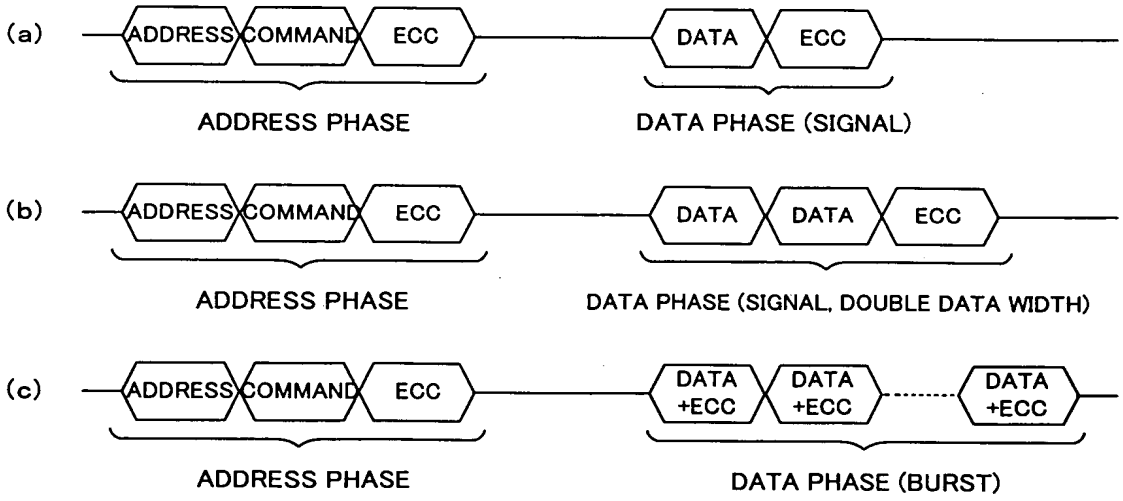
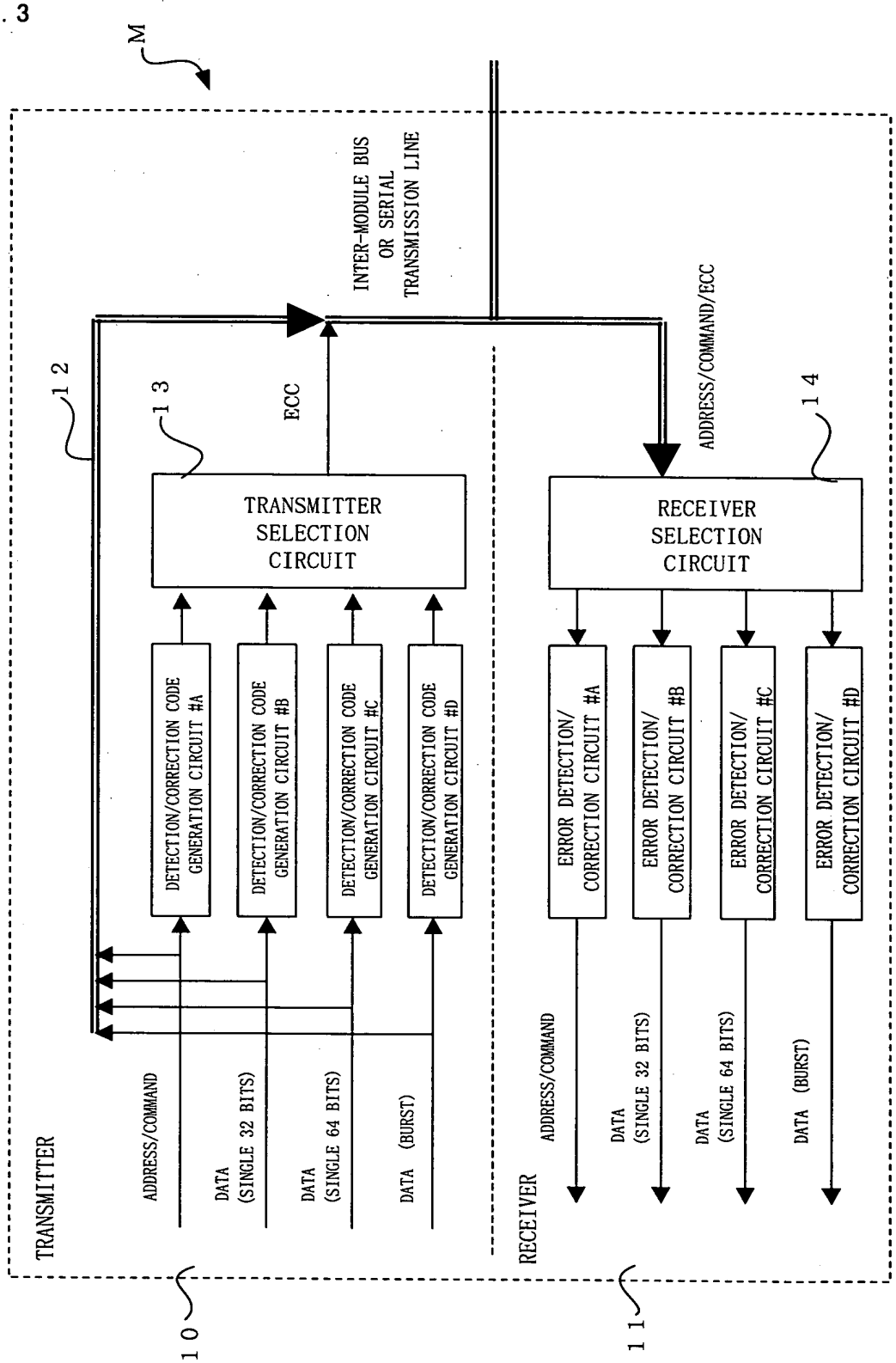

(a)
ADDRESS
COMMAND
ECC
DATA
ECC
ADDRESS PHASE
DATA PHASE (SIGNAL)
(b)
ADDRESS
COMMAND
ECC
DATA
DATA
ECC
ADDRESS PHASE
DATA PHASE (SIGNAL, DOUBLE DATA WIDTH)
(c)
ADDRESS
COMMAND
ECC
DATA +ECC
DATA +ECC
DATA +ECC
ADDRESS PHASE
DATA PHASE (BURST)

FIG. 3


M
INTER-MODULE BUS OR SERIAL TRANSMISSION LINE
12
13
ECC
ADDRESS/COMMAND/ECC
14
TRANSMITTER SELECTION CIRCUIT
RECEIVER SELECTION CIRCUIT
DETECTION/CORRECTION CODE GENERATION CIRCUIT #A
DETECTION/CORRECTION CODE GENERATION CIRCUIT #B
DETECTION/CORRECTION CODE GENERATION CIRCUIT #C
DETECTION/CORRECTION CODE GENERATION CIRCUIT #D
ERROR DETECTION/ CORRECTION CIRCUIT #A
ERROR DETECTION/ CORRECTION CIRCUIT #B
ERROR DETECTION/ CORRECTION CIRCUIT #C
ERROR DETECTION/ CORRECTION CIRCUIT #D
TRANSMITTER
RECEIVER
ADDRESS/COMMAND
DATA (SINGLE 32 BITS)
DATA (SINGLE 64 BITS)
DATA (BURST)
ADDRESS/COMMAND
DATA (SINGLE 32 BITS)
DATA (SINGLE 64 BITS)
DATA (BURST)
10
11